LISTING OF THE CLAIMS

1. (Previously Presented) An acoustic liner arranged to attenuate sound, comprising a top sheet having substantially linear characteristics and a liner core or cavity, wherein the top sheet comprises a layer of a metallic foam.

2. (Previously Presented) An acoustic liner according to claim 1, wherein the top sheet has a non-linearity factor within a range between 1.0 and 3.0.

3. (Previously Presented) An acoustic liner according to claim 2, wherein the nonlinearity factor is within a range between 1 and 2.5.

4. (Previously Presented) An acoustic liner according to claim 3, wherein the nonlinearity factor is within a range between 1.5 and 2.0.

5. (Previously Presented) An acoustic liner according to claim 1, wherein a first surface of said metallic foam layer is attached to one side of said liner core.

6. (Previously Presented) An acoustic liner according to claim 1, wherein the liner core is a honeycomb core.

7. (Previously Presented) An acoustic liner according to claim 1, wherein the liner core is a core of metallic foam.

8. (Previously Presented) An acoustic liner according to claim 1, wherein the top sheet further comprises a perforated sheet attached to the metallic foam layer.

9. (Previously Presented) An acoustic liner according to claim 1, wherein the metallic foam layer is arranged to withstand temperatures above about 400° C.

10. (Previously Presented) An acoustic liner according to claim 9, wherein the metallic foam layer is arranged to withstand temperatures around 700° C.

11. (Previously Presented) An acoustic liner according to claim 10, wherein the metallic foam layer comprises a metal or metal alloy including Nickel, Titanium and/or Chromium.

12. (Previously Presented) An acoustic liner according to claim 1, wherein the metallic foam is at least partly open-porous.

13. (Previously Presented) An acoustic liner according to claim 1, wherein the top sheet is compressed.

14. (Previously Presented) An acoustic liner according to claim 13, wherein the top sheet is compressed to a different degree in different areas of the sheet.

15. (Previously Presented) An acoustic liner according to claim 14, wherein the degree of compression is stepwise increased/decreased over the top sheet.

16. (Previously Presented) An acoustic liner according to claim 14, wherein the degree of compression is continuously changed over the top sheet.

17. (Previously Presented) An acoustic liner according to claim 1, wherein the top sheet is designed for attenuating various acoustic environments such as different flight conditions for aircraft engines.

18. (Previously Presented) Use of an acoustic liner according to claim 1 in a hot stream environment.

19. (Previously Presented) Use of an acoustic liner according to claim 18 in a hot area of an aircraft engine.

20. (Previously Presented) Method for manufacturing an acoustic liner, comprising the following steps:

forming a top sheet including a metallic foam layer and having substantially linear characteristics and brazing said top sheet onto one side of a liner core.

21. (Previously Presented) Method according to claim 20, wherein a perforated sheet is brazed onto the foam layer in forming the top sheet.

22. (Previously Presented) Method according to claim 20, wherein the top sheet is formed through applying pressure to selected areas of the top sheet surface.

23. (Previously Presented) Method according to claim 22, wherein the pressure is applied to a different degree in different areas of the top sheet.

24. (Previously Presented) Method according to claim 23, wherein the pressure applied over the different areas is stepwise increased/decreased.

25. (Previously Presented) Method according to claim 23, wherein the pressure applied over the different areas is increased/decreased in a continuous manner.

26. (Previously Presented) An acoustic liner, comprising:

a liner core; and

a top sheet comprising a layer of a metallic foam attached to the liner core, wherein the metallic foam is compressed to satisfy flow and temperature linearity requirements of the acoustic liner.

27. (Previously Presented) The acoustic liner according to claim 26, wherein the metallic foam is compressed to form a pre selected pattern which constrains a non linearity of the acoustic

liner.

28. (Previously Presented) The acoustic liner according to claim 27, wherein the metallic foam is compressed to form a step like surface which proximately faces a hot stream environment.

29. (Previously Presented) The acoustic liner according to claim 27, wherein the metallic foam is compressed to form a curved surface which proximately faces a hot stream environment.